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COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, APRIL 15, 1999

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. PUC970005

Ex Parte: To determine prices
Bell Atlantic-Virginia, Inc. is
authorized to charge Competitive
Local Exchange Carriers in accordance
with the Telecommunications Act of
1996 and applicable State law

FINAL ORDER

A. Background and Procedural History

On November 19, 1998, the Virginia State Corporation Commission (“Commission”) entered an Order (“Revision Order”) in this matter directing Bell Atlantic-Virginia, Inc. (“BA-VA”) to re-run its Switching Cost Information System model using the criteria and directives of the Revision Order and to submit the results and accompanying work papers to the Commission, Staff, and all parties on or before December 11, 1998. The Revision Order also allowed for comments to be filed on or before December 21, 1998, relating only to the issue of whether BA-VA correctly implemented the directives of that Order. A suggested re-formulation of the distribution

cable fill factor submitted by AT&T Communications of Virginia, Inc. (“AT&T”) was denied in the Revision Order.

BA-VA filed the results of its re-run cost studies on December 11, 1998, together with copies of an updated schedule of unbundled network element (“UNE”) prices. Comments were filed on December 21, 1998, by the Commission Staff concluding that the revised prices submitted by BA-VA properly reflected the directives of the Revision Order. No further comments have been filed in this matter.

On January 25, 1999, the United States Supreme Court (“Court”) handed down its decision in AT&T Corp. vs. Iowa Utilities Board, 119 S.Ct. 721, ___ U.S. ___ (1999). The Court reinstated the pricing rules adopted by the Federal Communications Commission (“FCC”) in its First Report and Order, CC Docket Number 96-98, released August 8, 1996. The FCC’s pricing rules had been stayed and were eventually vacated by the decision of the Eighth Circuit Court of Appeals in Iowa Utilities Board vs. FCC, 120 F.3d 753 (8th Cir. 1997) during our consideration of this case. Heretofore, the Commission’s consideration of pricing matters had been based upon the statutory criteria of the Telecommunications Act of 1996, and specifically §§ 251 and 252 of Title 47 of the U. S. Code (“TA 96” or “Act”). The Commission has made extensive use of the FCC’s First Report and Order as a source of information pertinent to pricing decisions. Now that the FCC rules have been reinstated, the Commission has reviewed its Order of May 22, 1998, (“Inputs Order”) and the Revision Order, and we are satisfied that our actions in this case are compatible with the Act and the reinstated FCC rules.

While the Supreme Court did vacate the FCC's Rule 51.319 and remand the matter¹ to the FCC for an additional determination of essential elements that incumbent local exchange carriers ("ILECs") must unbundle, in this Order we are assuming that the original seven categories of elements will be reestablished in conformity with § 251(d)(2).

Since the Act became law we have complied with its terms. We have, for example, conducted arbitrations and set rates in proceedings similar to the one involved in this Order, and we have approved negotiated agreements. Parties in two cases sought review of our actions, and the United States District Court for the Eastern District of Virginia has twice held that, as a result of carrying out our duties, we have waived the sovereign immunity of the Commonwealth of Virginia.² We cannot and do not waive such immunity by our actions.

The Virginia Constitution provides that this Commission ". . . shall have the power and be charged with the duty of regulating the rates, charges, and services . . . of . . . telephone . . . companies."³ Enactments of the General Assembly also impose

¹ Slip op. at p. 25.

² GTE South, Inc. v. Morrison, et al., No. 3:97CV493, slip op. at 4-5 (E.D.Va., Nov. 7, 1997) and MCI Telecommunications of Virginia, Inc. v. Bell Atlantic-Virginia, Inc., No. 3:97CV629, slip op. at 5 (E.D.Va., Dec. 24, 1997).

³ Va. Const. art. IX, § 2.

obligations on the Commission.⁴ No other agency, state or federal, has such power or is charged with such duties with respect to telephone service in Virginia. Nothing in the Virginia Constitution, nor in Virginia statutory law, allows us to ignore our duties. Similarly, nothing in the Virginia Constitution, nor in Virginia statutory law, either directly or indirectly, allows us to waive the sovereign immunity of Virginia and to subject the Commonwealth to suit in federal court. As interpreted by the United States District Court for the Eastern District of Virginia, however, Congress, by enacting §§ 252(e)(4)-(6) of the Act, has presented us with what the court describes as a “voluntary” choice. In fact, it is a Hobson’s choice; we may either ignore our Constitutional duty to regulate the “rates, charges and services” of telephone companies in Virginia, or we may carry out our duty and, by so doing, subject the Commonwealth to federal suit.⁵ We can neither voluntarily waive our Constitutional and statutory regulatory duty, nor voluntarily waive Virginia’s sovereign immunity.

⁴ For example, even prior to the passage of the Act, the Virginia General Assembly had charged us to take action with respect to the development of a competitive market for local telephone service in Virginia. In 1995, the Assembly enacted Va. Code § 56-265.4:4 C 1-3, authorizing the Commission to “grant certificates to applicants proposing to furnish local exchange telephone service in the service territory of another certificate holder.” That section also directed the Commission to “promulgate rules necessary to implement this subsection. These rules shall (i) promote and seek to assure the provision of competitive services to all classes of customers throughout all geographic areas of the Commonwealth by a variety of service providers; . . .”

⁵ The U.S. District Court for the Middle District of Louisiana has recently ruled that this is no choice at all and that the 11th Amendment provides immunity from suit under the Act. AT&T Communications v. BellSouth Telecommunications, 1999 W.L. 181674 (M.D. La., March 29, 1999). As the District Court explains, “The option of either consenting to federal regulation and waiving immunity or losing the previously held power to regulate a local exchange carrier is not a choice that this court sees as voluntary.” Slip op. at 7. The District Court concluded that under the 11th Amendment the Louisiana Public Service Commission is immune from suit under § 252(e)(6) of the Act. We believe the BellSouth Court is correct and that our actions today are not properly subject to review by a federal district court pursuant to the Act.

We enter this Order to carry out our obligations under the Constitution and laws of Virginia and the Act in order to promote and protect the interest of the Commonwealth and her citizens. We cannot and we do not waive the sovereign immunity of the Commonwealth of Virginia. Nothing in this Order should be construed, by implication or otherwise, to waive the Commonwealth's 11th Amendment right of sovereign immunity.

The Commission today restates and, where necessary, expands discussion of the decisions made in its Orders of May 22, 1998, and November 19, 1998. In this Order, we are adopting the rates filed by BA-VA on December 11, 1998, and attached hereto as Appendix A. The rates determined herein shall be applied prospectively in existing BA-VA arbitrated interconnection agreements.⁶ We do not determine rates for the Statement of Generally Available Terms and Conditions because it was withdrawn on January 20, 1999.⁷

B. Economic Principles and Selection of Economic Model

The principles of total, forward-looking, long-run incremental costs are appropriate for determining prices for UNEs. The application of these principles reflects BA-VA's existing wire center locations and the most efficient technology that can reasonably be employed in the immediate future. An appropriate allocation of shared

⁶ BA-VA has negotiated the use of these rates determined in this case to be used prospectively in most, if not all, of its existing negotiated agreements.

⁷ Letter filed by BA-VA on January 20, 1999, in Case No. PUC960160.

costs and common overhead costs, excluding retailing costs, has been included in the UNE prices.

Even though there was agreement among the parties and the Staff on the basic principles,⁸ there was wide disagreement concerning their precise application in the cost studies. The Commission's application of these principles is based on a balanced and careful consideration of all the evidence in the record of this proceeding. We have not relied on decisions or results from other states except to the extent they are analyzed and supported in this record.

We are of the opinion that a forward-looking costing principle can reflect expected actual conditions, based on the record before us. We have reflected such conditions in our decision on switching investment determinations, where add-on equipment purchases are recognized; our decision on customized routing, where expenditures due to the presence of analog switching are recognized; our decision on service-order costs, where a mechanized procedure phase-in is recognized; and elsewhere in the decisions set out below. Such decisions are necessary for the resulting prices to be just and reasonable.

The BA-VA system of models has been modified as specified in Sections C through I, including the use of an 8.01% common overhead factor.⁹

⁸ See, for example: Post-Hearing Brief of AT&T, September 9, 1997, pp. 11-12; Brief of BA-VA, September 9, 1997, pp. 12-13; Post-Hearing Brief of MCIMetro, September 9, 1997, p. 2; and Post-Hearing Brief of the Commission Staff, September 9, 1997, p. 5.

⁹ Exhibit Staff-173-P, p. 50.

C. Recurring Investment-Related Costs

The BA-VA system of models for recurring costs follows a two-step process: first, the investment required for a given element is determined; and, second, the recurring investment-related costs are determined by multiplying that investment by an annual cost factor produced by the CAPCOST+ model. The CAPCOST+ model has produced annual cost factors appropriate for use in all recurring cost computations now required in this proceeding to the extent that it used the inputs specified below in this section.

(1) We find that the overall, forward-looking cost of capital for BA-VA is 10.12%. This cost of capital has been determined by using a capital structure of 40% debt and 60% equity, a cost of debt of 7.6%, and a cost of equity of 11.8%. The only cost of capital proposed that would exceed the 10.12% used in the Inputs Order is that of BA-VA's witness, Dr. Vander Weide. The primary reason that his overall cost of capital was higher was the 14.9% return on equity that he proposed. The 11.8% return on equity used in the Inputs Order is at the top of the ranges presented by other cost of capital witnesses.

Dr. Vander Weide and other cost of capital witnesses used the discounted cash flow methodology. Dr. Vander Weide, however, reached a higher recommendation by using more risky industrial firms from the S&P Industrials rather than using comparable telecommunications firms.¹⁰ Dr. Vander Weide argued that BA-VA's cost of equity must

¹⁰ Exhibit JHV-2-R, p. 65.

reflect that of companies operating in more risky competitive markets. We do not adopt his recommendation.

Staff Witness Oliver pointed out that equity markets are by nature forward-looking and that market prices are based upon anticipation of future performance, earnings, and risks.¹¹ While our decision is based on the record before us in this case, the performance of the capital markets since the hearings during the summer of 1997 has borne this out as the market price of Bell Atlantic Corporation's ("BA's") shares has continued to advance and BA's beta has remained at a level near .90. Using Staff Witness Oliver's rough approximation of an equity return, i.e., adding 400 basis points to Dr. Vander Weide's 7.6% cost of debt,¹² indicates that the 11.8% equity return determined by the Inputs Order is more than sufficient to allow BA-VA an opportunity to earn returns commensurate with those earned in business undertakings of corresponding risks and uncertainties. Such a return is consistent with the reasonable profits contemplated by § 252(d) and will allow BA-VA to continue to attract capital and maintain its financial integrity.

(2) The depreciation lives prescribed in the Inputs Order are the only ones that have been given the thorough scrutiny of a full triennial, three-way represcription, which was conducted by the company, the Staff, and the FCC in 1993.¹³ During discovery, BA-VA did not produce the studies or analyses upon which it relied to estimate BA-VA's

¹¹ Exhibit Staff-173-P, Appendix I, p. 1.

¹² Transcript, pp. 2519-20.

¹³ Exhibit Staff-173-P, p. 54.

depreciation lives. Its witness, Dr. Vanston, referred to such studies and reports during his ore tenus testimony.¹⁴ BA-VA was ordered to supply copies of the studies and reports. After an analysis of the studies and reports, the Staff confirmed that they were nationwide studies and not specific to BA-VA.¹⁵ Dr. Vanston conducted no analytical study of the BA-VA proposed economic lives. Rather, his testimony was presented only to comment on the reasonableness of BA-VA's proposed lives.¹⁶

As an alternative, BA-VA subsequently proposed the use of its "financial reporting lives." However, these lives also have never had the scrutiny of regulatory analysis.¹⁷ The Commission cannot base just and reasonable depreciation costs on unexamined and speculative economic lives.

(3) The planning-period input has been established as sufficient to cover the life of all vintages in the studies. This means the CAPCOST+ input for this parameter has been established at 40 years. It is essential for the CAPCOST+ levelization calculations to include all years of investment lives so that all costs generated (depreciation, cost of money, and taxes) by that investment are reflected in the levelized unit costs. The Commission is aware that 40 years is not sufficient to capture all vintages' lives in the Buildings and Conduit categories, but since CAPCOST+ will not process a planning

¹⁴ Transcript, p. 469.

¹⁵ Transcript, p. 470 and pp. 2589-90.

¹⁶ Exhibit LKV-12, p. 2; Transcript, p. 469.

¹⁷ Transcript, p. 2560.

period longer than 40 years and the excluded costs are negligible, we find that 40 years is appropriate for use in these studies.

CAPCOST+'s annual cost factors are unaffected for categories with lives less than 40 years.¹⁸ Investment will generate capital costs only until it is retired and none thereafter. The planning period input bears no necessary relationship to any other CAPCOST+ input.¹⁹

(4) The survivor curve parameter specifies a rectangular shape, known as a “9 curve” in the CAPCOST+ documentation. The studies in this proceeding are intended to produce the cost of an average unit, and this is best accomplished by the use of a survivor curve input that forecasts no retirements needing to be replaced by the introduction of new investment into the study.²⁰ The investment in an average unit will not change during its life. The Commission’s decisions in this proceeding are directed toward the determination of average unit costs/prices. Correct average unit prices should allow BA-VA to recover its costs of providing UNEs, regardless of when the units are placed and retired.²¹

(5) The number of vintages for these studies is five (5). Using 5 vintages will provide the most realistic estimate of expected plant price inflation/deflation. This also

¹⁸ Staff Objection to Exhibit RLS-190, August 13, 1997; VCTA Comments, July 31, 1998, pp. 14-15.

¹⁹ Staff Report, August 31, 1998, pp. 13-14.

²⁰ Exhibit Staff-173-P, p. 58.

²¹ Staff Report, August 31, 1998, pp. 11-13.

recognizes that the network being hypothetically constructed for these cost studies will not be placed instantaneously, but over a more realistic five-year period.

(6) The maintenance factors that have been used in these studies are those recommended by the Staff²² and further adjusted by BA-VA for the rerun studies filed July 8, 1998.²³ The Staff's recommended factors as further refined by BA-VA are necessary to represent a realistic forward-looking view and to reiterate the Commission's finding in the BA-VA 1996 arbitration cases.²⁴

(7) The BA-VA-proposed administration factor has been used for these cost studies because it is the most accurate and best-supported factor in this record.

(8) The BA-VA-proposed shared cost factor has been used for these cost studies because it is the most accurate and best-supported factor in this record.

(9) The CAPCOST+ treatment of present values and demand/cost inflation is acceptable; therefore, we have declined to adopt the alternative methodologies proposed by VCTA.

²² Exhibit Staff-173-P, pp. 56-57.

²³ Staff Report, August 31, 1998, pp. 15-16.

²⁴ Page 5 of Order Resolving Wholesale Discount for Resold Services entered November 8, 1996, in Case Nos. PUC960100, PUC960103, PUC960104, PUC960105, and PUC960113. 1996 S.C.C. Annual Report, pp. 222-223.

D. Loop Investment Determinations

Determinations of loop investments have incorporated the specifications in this section. Loop costs have been determined by incorporating the requirements of Sections B and C above.

(1) BA-VA's models have been revised as necessary to ensure results that incorporate the correct processing of each of the following methods and input values.

(2) The BA-VA-determined ISDN loop investment increment has been used as it now stands in this record. The BA-VA methodology for ISDN loop investment, which specifies an ISDN increment added to a two-wire loop investment and includes an 85% fill factor for ISDN electronics, has been used.

(3) The four-wire loop investment has been determined according to the Staff-recommended methodology,²⁵ incorporating all Commission modifications to the two-wire loop, including the use of a factor of .89 to adjust average loop length to the length of a four-wire loop.

(4) The BA-VA-determined DS-1 loop investment has been used as it now stands in this record, based on the BA-VA methodology, including the use of an 85% fill factor for the DS-1 electronics.

(5) The cost and price of xDSL (ADSL and HDSL) loops are not part of this proceeding, as determined in the March 21, 1997, Order Prescribing Additional Issues, at page 3. The Commission found at that time that these kinds of loops are not "network

²⁵ Exhibit Staff-173-P, p. 80.

elements,” as defined in the Act, because they were not then part of any service offered to the general public.

6) BA-VA’s proposed method for loading supporting structure (poles and conduit) investment onto the loop cable investment²⁶ has been used. No party or the Staff proposed an alternative to this method, and the Commission accepts the BA-VA method as the only one supported in this record.

(7) No cable fill factor, or any other fill factor, should affect land and buildings investment loadings. BA-VA’s land and buildings factor²⁷ has been used to include those investments in loop investments, where land and buildings investment is required to house various loop electronics, but it has not been increased by any fill factor adjustment.

(8) The definitions and factors immediately below have been used to reflect the investment necessitated by spare loop facilities:

- The definition of fill factor has been established as the quotient of dividing total capacity into the amount of capacity in use and assigned for use, with divisor and dividend expressed in the units by which the network element’s capacity is measured.
- Distribution cable investment has been based on a fill factor of 50%. BA-VA’s model has been modified as necessary to ensure that its f2/f1 method is overridden, that distribution fill is not multiplied by feeder fill, and that a fill factor of 50% is correctly reflected in this investment.

²⁶ Exhibit ERB-27-P, Exhibit 1, p. 7.

²⁷ Exhibit ERB-27-P, Exhibit 1, p. 7.

From the wide range of fill factors proposed in this proceeding, the Commission has selected the Staff's analysis, which determined a 50% fill factor for distribution cable. This analysis is reasonable because it means that all aerial cable capacity would be exhausted by the end of its life, which is midway between the lives of buried cable and underground cable, at the growth rate forecasted by BA-VA.²⁸ Such an analysis corresponds to BA-VA's current engineering practice of placing sufficient distribution cable to serve its "ultimate demand"²⁹ and is also consistent with its recent practice of placing two (2) pairs per living unit.³⁰

- Copper feeder cable investment reflects a fill factor of 77%. We have selected the Staff's analysis to reflect a five-year feeder relief cycle based on the growth rates forecasted by BA-VA.³¹

- Fiber feeder cable investment reflects a fill factor of 90%. The Commission has applied its judgment in selecting this factor, based on the range of factors proposed by the parties and Staff.

- DLC electronics investment reflects a fill factor of 85%. We have selected the BA-VA proposal.³²

²⁸ Exhibit Staff-173-P, pp. 67-68.

²⁹ Brief of BA-VA, September 9, 1997, p. 116.

³⁰ Brief of BA-VA, September 9, 1997, p. 119.

³¹ Exhibit Staff-173-P, p. 67.

³² Brief of BA-VA, September 9, 1997, p. 126.

- ISDN loop electronics investment reflects a fill factor of 85%. We have selected the BA-VA proposal.³³
- DS-1 loop electronics investment reflects a fill factor of 85%. We have selected the BA-VA proposal.

(9) Loop investments have been determined by using a copper-fiber breakpoint of 9,000 feet. This breakpoint provides the most cost-efficient voice-grade loops³⁴ and ensures that market considerations of other services are excluded.

(10) BA-VA's cable costs have incorporated the TPI correction recommended by both AT&T/MCI³⁵ and Staff.

(11) NGDLC investment has been used as proposed by BA-VA, including the estimated mix of IDLC and UDLC proposed by BA-VA.³⁶ This mix is necessary to reflect the forward-looking reality of how unbundled loops will be provided.

(12) Minimum cable sizes have been used as proposed by BA-VA.

E. Loop Price Groups/NID

(1) Loop prices have been deaveraged into the three groups proposed by the

³³ Exhibit Staff-173-P, p. 80.

³⁴ Exhibit Staff-173-P, p. 76.

³⁵ Exhibit MRB-132-P, p. 6.

³⁶ Exhibit ERB-29-R-P, p. 26.

Staff.³⁷ This arrangement is most closely related to loop costs; and, therefore, it is the best reflection in this record of the Act's requirement to base network element prices on costs.

(2) The NID is not affected by any of the loop cost parameters and is independent of the loop costs. All of the Commission's inputs have been used in running the BA-VA models and the Hatfield model, and the results are comparable. However, the Hatfield model has proven to be more convenient and expedient in producing the NID price. Therefore, we affirm the Staff's recommended methodology for determining the price of a NID.³⁸ The resulting monthly price is \$0.44.

F. End-Office Switching Investment and Rate Structure

Determinations of end-office switching investments have incorporated the specifications in this section. End-office switching costs have been determined by incorporating the requirements of Sections B and C above.

(1) BA-VA's model reruns have ensured the correct processing of each of the following specifications.

(2) Switch port differentiation, according to port type, has been established as it now stands in this record. There has been a separate price determination for each type of port specified by BA-VA.³⁹ We find that the cost-based pricing specified in the Act requires these separate prices because the costs are significantly different.

³⁷ Exhibit Staff-175, pp. 17-19.

³⁸ Exhibit Staff-173-P, p. 82.

³⁹ Exhibit RWW-35, Exhibit A, p. 3.

(3) The usage rate for end-office switching has been established as a per-minute structure including the 26 vertical features currently offered by BA-VA. The usage investment has been determined as proposed by BA-VA and includes the currently offered 26 vertical features. We find that a proper application of the Act's definition of a network element requires the end-office switching element to include only these features.

(4) Switching equipment price discounts have been determined based on a mix of 54% replacement, 46% add-on equipment purchases. This mix reflects the pattern of equipment purchases necessary for a given switch to serve all the lines it must serve during its life.⁴⁰ The mix specifies not when these purchases will be made but only that 54% of them will be complete switch purchases (i.e., replacement). The remaining 46% may be purchased at any time, but as add-on equipment. The Commission has relied on the BA-VA line forecast, as discussed by Staff witness Dr. Hlavac,⁴¹ as the most realistic basis for this determination.

(5) Land and buildings investment loadings have been computed by using the BA-VA-proposed factor as it stands in this record. We find that land and buildings loadings are necessary, and neither the Staff nor any party proposed an alternative. BA-VA's factor is the only one supported in this record.

(6) Vertical features investment has been determined to reflect the presence of the 26 features currently offered by BA-VA. Henceforth, before BA-VA will be permitted to offer any new vertical feature(s) to any customer, general public or carrier,

⁴⁰ Brief of BA-VA, September 9, 1997, p. 150.

⁴¹ Transcript, pp. 2705-8.

thirty (30) days in advance of the offering it will be required to file with the Commission an application containing a proposed price(s) for such feature(s), developed consistent with this Order, and shall notify all certificated CLECs. In the event that a CLEC requests a new vertical feature before BA-VA plans to offer it, such request shall be treated as a new negotiation under the Act.

(7) Investment required for customized routing has been determined to be the same as that underlying the Staff-proposed prices.⁴² We find that this approach is the best available reflection of the realistic forward-looking approach we have adopted in this proceeding.

(8) The End-Office switching rate structure has been established to provide separate prices for originating traffic and terminating traffic, as proposed by BA-VA.⁴³ We find that the cost-based pricing specified in the Act requires such a pricing structure because originating and terminating costs are significantly different.

(9) The Local Call Termination rate structure has been established to provide per-minute rates for traffic terminating in the BA-VA local calling areas. Contrary to the position of TCG,⁴⁴ we find that flat-rate, LATA-wide rates are not consistent with § 251(g) of the Act.

⁴² Exhibit Staff-175, p. 29.

⁴³ Exhibit RWW-35, Exhibit A, p. 3.

⁴⁴ Brief of TCG, filed September 9, 1997, p. 5.

(10) Application of the local call termination rates shall remain the same as the Commission determined in the 1996 BA-VA arbitration cases.⁴⁵

G. Transport Rate Structure and Rate Determination

Transport and tandem switching investment determinations have incorporated the specifications in this section, and their costs have been determined by incorporating the requirements of Sections B and C above.

(1) BA-VA's models have ensured the correct processing of each of the following specifications.

(2) The common transport price has been determined without distance sensitivity, but with a per-minute structure that reflects the average distance covered by a transmission.

(3) Dedicated transport prices have been determined with the transport facility separate from the terminal elements (e.g., multiplexing, digital cross-connect, etc.). This is necessary to comply with the Act's requirement that network elements be unbundled at "technically feasible" points.⁴⁶

(4) Common transport has been defined as transport that is shared by more than one carrier, regardless of whether a tandem switch is involved. Common transport may exist between end offices.

⁴⁵ Case Nos. PUC960100, PUC960103, PUC960104, PUC960105, and PUC960113. 1996 S.C.C. Annual Report, pp. 221-222.

⁴⁶ 47 U.S.C. § 251(c)(3).

(5) The Commission finds that there is no need for a combined tandem-switched transport rate. A tandem switching rate shall be applied only when a tandem switch is involved in the transport.

(6) Entrance facilities and digital cross-connect functions have been defined as separate rate elements, consistent with the BA-VA studies, to comply with § 251(c)(3) of the Act, as discussed in (3) above.

(7) “Local” call termination has been defined as pertaining to local traffic terminating in BA-VA’s local calling areas, not LATA-wide areas. We find that this is necessary to be consistent with § 251(g) of the Act.

H. Other Network Elements

(1) Signaling and Databases, Operator Services (including Directory Assistance), and Operations Support Systems: Even though no substantiation was given by BA-VA for its models and pricing of elements in these areas, the Commission, lacking an alternative proposal by the other parties, accepts the BA-VA methodology, together with the Commission’s requirements in Sections B and C above, that has been used to determine these prices.

(2) Daily Usage File (DUF): All DUF charges have been calculated as recurring because they are related to recurring capital costs. These charges have incorporated the Commission’s requirements in Sections B and C above.

(3) Line Information Database (LIDB) and Direct Access: BA-VA's methodology, together with the Commission's requirements in Sections B and C above, has been used to determine these prices.

I. Collocation

(1) BA-VA's collocation tariff rates, filed in this case on March 26, 1997, have been established as applicable in this case, except as noted below, because no sufficient alternative was offered in this record. The Commission finds that BA-VA's cost support for these rates is insufficient to determine whether these rates are based on total, forward-looking, long-run, incremental costs.

(2) Based on the Staff's recommendation, the recurring prices for collocation elements⁴⁷ have been determined by first reducing the BA-VA-determined costs by 30%, then adding common overhead costs according to the Commission's 8.01% loading from Section B above.

(3) BA-VA shall permit collocators to provide their own physical collocation infrastructure through subcontractors, in accordance with the FCC's Rules.⁴⁸ BA-VA shall revise its collocation tariff to incorporate this requirement.

(4) BA-VA's proposed prices for Cage Construction, Room Construction, AC Outlets, and Overhead Lighting that it supplies are acceptable because collocators shall be permitted to self-provide these elements, according to (3) above.

⁴⁷ Exhibit Staff-175, pp. 8-9.

⁴⁸ 47 C.F.R. § 51.323(j).

(5) BA-VA's proposed prices for Cable Racking, Cable Installation, and Virtual Collocation have been established in this case because no other party presented evidence sufficient to alter BA-VA's estimates.

(6) This Order does not foreclose any challenge to BA-VA's intrastate collocation tariff, and it does not address compliance with the FCC's recent rules.⁴⁹

J. Interim Number Portability

The Commission agrees with the August 31, 1998, Report of the Commission Staff ("1998 Staff Report") concerning Interim Number Portability ("INP"), pages 30-31. BA-VA suggests that INP costs be recovered solely from cost-causers, i.e., CLECs. This is contrary to § 251(e)(2) of the Act which requires that the costs be "borne by all telecommunications carriers on a competitively neutral basis as determined by the [Federal Communications] Commission."

The Commission finds that the "Rochester" approach discussed in the 1998 Staff Report is most appropriate. Under this methodology, BA-VA will annually assess a surcharge to each carrier based on its number of ported telephone numbers relative to the total number of active telephone numbers in BA-VA's local service area. BA-VA is directed to submit a proposed plan to the Commission's Staff at least forty-five (45) days prior to its proposed recovery implementation date and serve a copy upon all certificated LECs.

⁴⁹ In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further NOPR, CC Docket No. 98-147, released March 31, 1999.

The Commission finds no convincing reason to establish an industry task force on INP recovery.

K. Non-Recurring Charges

Even though there was a lack of comprehensive support for many of BA-VA's proposed prices, no other party offered better-supported alternatives for these prices. BA-VA has recomputed its non-recurring charges incorporating revisions specified in the Inputs Order and an 8.01% common overhead loading.

(1) BA-VA has recomputed all of its labor rate and levelization determinations incorporating the Staff's recommendation to apply a productivity adjustment in year 1 of the data projections. The Commission's overall cost of capital of 10.12% has been used as the discount rate. These changes also have been applied to the non-recurring charges associated with the collocation elements set forth in Exhibit Staff-175 at pages 8-9.

(2) BA-VA has recomputed its service order costs as directed in the Inputs Order by adopting the Staff's recommended projections of percent manual effort (100%, 70%, 45%, 25%, and 5%) beginning with year 1 and continuing through year 5.

(3) BA-VA has recomputed its installation costs and coordinated cutover with inputs modified as follows:

- The work time labeled "assignment" has been eliminated because the Commission has determined that CLECs will be able to perform this activity for themselves.
- The work time labeled "locate terminal" has been eliminated from premises

visit costs because the Commission has determined that travel time should cover this activity.

- The work time for “dispatch and closeout” has been reduced by half because the Commission has determined that the use of craft access terminals should permit such a reduction.
- The work time labeled “frame attendant” has been eliminated because the Commission has determined that this activity is covered by CSC maintenance.
- The work time labeled “RCMAC” has been eliminated because the Commission has determined that this activity is not attributable to CLECs, but it is caused by the presence of retail customers in general.

(4) All costs associated with disconnect activities have been separated from connect costs and used to create new disconnect charges for the same elements that the Staff recommended.⁵⁰ This also applies to the Intellimux elements for DS-0 and DS-1.⁵¹

(5) The Commission has declined to require the audit and true-up procedure recommended by the Staff.

(6) The Commission has determined that the cost of an initial directory listing is covered by other network elements, and no separate charge shall be applied to an initial directory listing; however, additional (tariffed) directory listings are not network elements as defined by § 3(29) of the Act. Such additional listings shall be provided to requesting carriers at the tariff rate less BA-VA’s wholesale discount.

⁵⁰ Exhibit Staff-173-P, p. 144, including the ISDN PRI port and the DID port.

⁵¹ Exhibit Staff-175, p. 6.

(7) The Commission has rejected the proposal by MFS to eliminate the price of customer-specified signaling.

Comments filed by AT&T and MCI in 1998, long after the closing of the evidentiary record herein, indicated that new evidence was available regarding BA-VA's non-recurring charges which would more accurately reflect these costs. These parties requested that the Commission make the non-recurring rates interim and open a new proceeding to establish permanent rates. The Commission allowed ample opportunity from January 1997 through the hearing dates in June and July 1997 for the parties to present all studies and evidence regarding the unbundled network elements addressed in this proceeding, and decisions were based on the extensive record filed and presented. Therefore, the Commission affirms the decisions made regarding non-recurring charges, does not accept the "new evidence" referred to by AT&T and MCI for consideration in this proceeding, and makes the non-recurring rates permanent instead of interim as requested by AT&T and MCI.

Conclusion

Based on the results and accompanying work papers filed by BA-VA and the comments filed by the Staff and various parties, it is the Commission's determination that BA-VA has followed the criteria and directives of its Orders of May 22, 1998, and November 19, 1998, and has properly implemented said directives in re-running its cost studies.

Accordingly, IT IS THEREFORE ORDERED THAT:

(1) The results of the re-run cost studies submitted by BA-VA on July 8, 1998, and December 11, 1998, are hereby accepted as appropriately reflecting the directives of the Commission's Orders of May 22, 1998, and November 19, 1998.

(2) The prices submitted by BA-VA on its updated schedule of unbundled network elements filed on December 11, 1998, and attached hereto as Exhibit A, are hereby adopted as the permanent prices for these elements.

(3) The price of a NID shall be forty-four cents (\$0.44) per month.

(4) At least forty-five (45) days prior to its proposed implementation date, BA-VA shall file with the Commission's Division of Communications a plan for INP recovery consistent with the methodology described above. No industry task force on INP recovery is necessary.

(5) BA-VA shall revise its collocation tariff to incorporate the requirement of 47 C.F.R. § 51.323(j) which permits collocators to provide their own physical collocation infrastructure through subcontractors.

(6) No separate charge shall be applied for an initial directory listing, and additional listings shall be provided to requesting carriers at the tariff rate less BA-VA's wholesale discount.

(7) Before BA-VA will be permitted to offer any new vertical feature(s) to any customer, general public or carrier, thirty (30) days in advance of the offering it shall file with the Commission an application containing a proposed price(s) for such feature(s), developed consistent with this Order, and shall notify all certificated CLECs. If a CLEC

requests a new vertical feature before BA-VA plans to offer it, this request shall be treated as a new negotiation under the Act.

(8) BA-VA shall follow all the directives of this Order, including those contained in the body of the Order.

THERE BEING NOTHING FURTHER to come before the Commission regarding this matter, this case shall be closed and the papers contained herein shall be placed in the file for ended causes.

Attachment A

BELL ATLANTIC - VIRGINIA						
UNBUNDLED NETWORK ELEMENTS						
CASE NO. PUC970005						
IN COMPLIANCE WITH SCC ORDERS DATED 5/22/98 and 11/19/98						
Common Overhead Factor =	0.0801	Recurring Summary				
Unbundled Elements		Direct	Shared	Total	Common Overhead	Total w/Overhead
		A	B	C = A+B	D = C*.0801	E = C+D
Unbundled Loop						
Density Cell 1						
Basic		8.32	1.62	9.94	0.80	10.74
ISDN		9.72	1.87	11.59	0.93	12.52
4W/Premium Loop		17.43	3.17	20.60	1.65	22.25
2 Wire Customer Specified Signalling		8.32	1.62	9.94	0.80	10.74
4 Wire Customer Specified Signalling		17.43	3.17	20.60	1.65	22.25
DS-1 Loop		88.08	14.33	102.41	8.20	110.61
Density Cell 2						
Basic		13.46	1.77	15.23	1.22	16.45
ISDN		14.86	2.02	16.88	1.35	18.23
4W/Premium Loop		27.30	3.47	30.77	2.46	33.23
2 Wire Customer Specified Signalling		13.46	1.77	15.23	1.22	16.45
4 Wire Customer Specified Signalling		27.3	3.47	30.77	2.46	33.23
DS-1 Loop		109.65	22.27	131.92	10.57	142.49
Density Cell 3						
Basic		24.30	2.92	27.22	2.18	29.40
ISDN		25.70	3.17	28.87	2.31	31.18
4W/Premium Loop		46.98	5.56	52.54	4.21	56.75
2 Wire Customer Specified Signalling		24.30	2.92	27.22	2.18	29.40
4 Wire Customer Specified Signalling		46.98	5.56	52.54	4.21	56.75
DS-1 Loop		146.51	21.34	167.85	13.44	181.29
Unbundled Switching						
PORTS (per month)						
POTS/PBX/CTX		0.98	0.22	1.20	0.10	1.30
ISDN PRI		61.49	13.76	75.25	6.03	81.28
ISDN Single line BRI or CTX Port		4.92	1.12	6.04	0.48	6.52
Public/Semi-Public		1.14	0.26	1.40	0.11	1.51
DID		2.69	0.67	3.36	0.27	3.63
Switching (per mou)						
Usage						
Originating with Vertical Services		0.001402	0.002421	0.003823	0.000306	0.004129
Terminating with Vertical Services		0.001434	0.000491	0.001925	0.000154	0.002079
POTS Features						
PBX		0.000342	0.000430	0.000772	0.000061	0.000833
Multi-Line Hunting		0.0000006	0.0000005	0.000001	0.000000	0.000001
Centrex Per MOU						
Intercom & Features		0.011112	0.004973	0.016084	0.001288	0.017372
Hunting		0.000269	0.000161	0.000430	0.000034	0.000464
UCD		0.000287	0.000320	0.000607	0.000048	0.000655
Queing		0.000153	0.000398	0.000551	0.000044	0.000595
Attendant		0.007228	0.012422	0.019650	0.001573	0.021223
Attendant Console		0.000012	0.015913	0.015925	0.001275	0.017200
Centralized Attendant Services		0.132921	0.065274	0.198195	0.015875	0.214070
Attendant Access Code Dialing		0.026519	0.010575	0.037094	0.002971	0.040065
ARS Per MOU		0.000095	0.000283	0.000378	0.000030	0.000408
ETS Per MOU		0.000503	0.000168	0.000671	0.000053	0.000724

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					Common	Total
Unbundled Elements		Direct	Shared	Total	Overhead	w/Overhead
		A	B	C = A+B	D = C*.0801	E = C+D
ISDN Usage						
Digital- Circuit Switch Voice/Features- Originating		0.001288	0.000558	0.001846	0.000147	0.001993
Digital- Circuit Switch Voice/Features- Terminating		0.000600	0.000196	0.000796	0.000063	0.000859
Digital- Circuit Switch Data- Originating		0.000692	0.000246	0.000938	0.000075	0.001013
Digital- Circuit Switch Data- Terminating		0.000600	0.000196	0.000796	0.000063	0.000859
ISDN Features						
Centrex		0.00214	0.00157	0.003710	0.000297	0.004007
Transport and Termination - per MOU						
Termination at Tandem		0.001142	0.000331	0.001473	0.000117	0.001590
Termination at End Office		0.000639	0.000220	0.000859	0.000068	0.000927
Tandem Transit Switch						
Tandem Switching MOU		0.000424	0.000084	0.000508	0.000040	0.000548
Common Transport (per MOU)						
Tandem Switching MOU		0.000424	0.000084	0.000508	0.000040	0.000548
Fixed- Common (Switched Transport - Fixed)		0.000079	0.000027	0.000106	0.000008	0.000114
Dedicated Transport - per Circuit						
Entrance Facilities						
DS-1 Channel Termination		94.73	15.58	110.31	8.84	119.15
DS-3 Channel Termination		667.15	43.38	710.53	56.91	767.44
Voice Grade Chan Term 2W		10.93	1.81	12.74	1.02	13.76
Voice Grade Chan Term 4W		22.31	3.51	25.82	2.07	27.89
DS-3 to DS-1 Multiplexing		160.18	11.78	171.96	13.77	185.73
DS-1 to voice Grade Multiplexing		46.37	3.41	49.78	3.99	53.77
-IOF						
DS-3 Fixed includes both ends		364.61	195.09	559.70	44.83	604.53
DS-1 Fixed includes both ends		24.68	7.82	32.50	2.60	35.10
Voice Grade Fixed includes both ends		7.98	0.85	8.83	0.71	9.54
DDS- Fixed- Includes both ends		8.24	0.87	9.11	0.73	9.84
STP Access Link includes one end		4.12	0.44	4.56	0.37	4.93
Collocation (Monthly)						
DS0 Elements						
Physical DS0: CO Side to Equip.		0.60	0.02	0.62	0.05	0.67
Virtual DS1 with EDSX (1 DS1+24DS0s with IDLC)		57.46	8.88	66.34	5.31	71.65
Virtual DS1 With CFA (24DS0S with IDLC)		43.34	7.06	50.40	4.04	54.44
Virtual DS0 with RFT ; CO Side MDF to Equip.		1.25	0.22	1.46	0.12	1.58
DS3/DS1 STANDALONE Elements						
Physical DS3 STANDALONE						
Physical DS3 (X-CONNECT)		81.70	8.18	89.89	7.20	97.09
Cable Rack		1.26	0.16	1.42	0.11	1.53
Physical DS1 STANDALONE						
Physical DS1 (X-CONNECT)		13.86	1.71	15.57	1.25	16.81
Cable Rack		1.26	0.16	1.42	0.11	1.53
Virtual DS3 STANDALONE (X-CONNECT)		82.56	11.40	93.96	7.53	101.49
Virtual DS1 STANDALONE (X-CONNECT)		14.12	1.82	15.94	1.28	17.22

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Unbundled Elements		<u>Direct</u>	<u>Shared</u>	<u>Total</u>	<u>Common Overhead</u>	<u>Total w/Overhead</u>
		A	B	C = A+B	D = C*.0801	E = C+D
Digital Cross Connect System						
Port Cost Per Month						
DS0 Termination		18.51	0.03	18.54	1.49	20.03
DS1 Termination		64.42	0.34	64.76	5.19	69.95
Signaling						
STP Port Termination (Monthly)		347.74	76.94	424.68	34.02	458.70
Signaling Database						
Databases						
'800						
basic query		0.000566	0.000043	0.000609	0.00005	0.000658
vertical query		0.000130	0.000038	0.000168	0.00001	0.000181
LIDB (Per Query)						
Calling Card		0.0138	0.0004	0.0142	0.0011	0.0153
Billed Number Screening		0.0138	0.0004	0.0142	0.0011	0.0153
Directory Assistance						
Direct Access (per call)		0.0261	0.0029	0.0290	0.00232	0.0313
Directory Assistance Cost per Call		0.2888	0.0083	0.2971	0.0238	0.3209
DA Transport						
Tandem Switched Transmission Cost per Call						
Transport		0.000068	0.000023	0.000091	0.00001	0.000098
Tandem Switching Cost per Call		0.000362	0.000072	0.000434	0.000034	0.000468
Call Completion						
Cost per Operator Work Second (Live)		0.009351	0.000348	0.009699	0.000776	0.010475
Cost per Operator Work Second (Automated)		0.003767	0.001369	0.005136	0.000411	0.005547
Customized Routing						
Per Line		0.09689	0.0150	0.11189	0.00896	0.12085
Per Call		0.04845	0.0075	0.05595	0.00448	0.06043
Daily Usage File						
Cost per Tape		17.90	0.66	18.56	1.49	20.05
Network Data Mover		0.000086	0	0.000086	0.000007	0.000093
CABS Billing per Bill Entry		0.000100	0	0.000100	0.000008	0.000108
CMDS		0.000086	0	0.000086	0.000007	0.000093
Message Recording		0.000228	0	0.000228	0.000018	0.000246
DUF Transport						
Communication Ports						
9.6kb		79.81	28.36	108.17	8.66	116.83
56kb		330.57	117.45	448.02	35.89	483.91
256kb		549.85	195.36	745.21	59.69	804.90
T1 Port		1,962.01	697.11	2,659.12	213.00	2,872.12
Port Maintenance						
9.6kb		9.42	0.00	9.42	0.75	10.17
56kb		26.00	0.00	26.00	2.08	28.08
256kb		26.00	0.00	26.00	2.08	28.08
T1 Port		330.16	0.00	330.16	26.45	356.61

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					Common	Total
Unbundled Elements		Direct	Shared	Total	Overhead	w/Overhead
		A	B	C = A+B	D = C*.0801	E = C+D
Computer Processing Usage (CPU) per customer						
Data Transmission (CMDS and Tape)		1.09	0.00	1.09	0.09	1.18
Line Installation		1.09	0.00	1.09	0.09	1.18
Network Control Program Coding		1.09	0.00	1.09	0.09	1.18
Port Set Up		0.17	0.00	0.17	0.01	0.18
Operations Support Systems						
Pre-Ordering Per Query		0.22	0.00	0.22	0.01789	0.24
EB-OSI Maintenance Per Trouble Ticket		1.07	0.00	1.07	0.08571	1.16
Ordering Per Transaction		3.45	0.09	3.54	0.28367	3.83
Non-Paper Media per CD-ROM		226.88	0.00	226.88	18.17	245.05
SMS Pricing (AIN Service Creation)						
Developmental Charges						
Service Creation Access Ports		125.51	0.53	126.04	10.10	136.14
Service Creation Usage						
Remote Access per 24 Hour Day		864.26	307.97	1,172.23	93.90	1,266.13
On-Premise per 24 Hour Day		864.26	307.97	1,172.23	93.90	1,266.13
Certification and Testing per Hour		70.82	0	70.82	5.67	76.49
Help Desk Support Per Hour		74.95	0	74.95	6.00	80.95
Service Charges						
Subscription Charges		0.7415	0.1472	0.8887	0.07	0.96
Database Queries						
Network Query		0.0005	0.00011	0.0006	0.000048	0.0006
CLEC Network Query		0.0005	0.00011	0.0006	0.000048	0.0006
CLEC Switch Query		0.0005	0.00011	0.0006	0.000048	0.0006
Trigger Charge						
Line Based		0.00017	0.00022	0.00039	0.00003	0.00042
Office Based		0.00017	0.00022	0.00039	0.00003	0.00042
Utilization Element		0.00024	0.00005	0.00029	0.00002	0.00031
Service Modification						
DTMF Update Per Change		0.07	0.02	0.09	0.01	0.10
Service Order Input						
Switched Based Announcement		0.00203	0.00091	0.00294	0.00024	0.00318
Interim Number Portability						
Cost Per MOU w/Transport		0.000887	0.000508	0.001395	0.00011	0.00151
Cost Per MOU w/oTransport		0.000701	0.000450	0.001151	0.00009	0.00124

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NON-RECURRING SUMMARY																							
Common Overhead Factor =																							
0.0801																							
INSTALLATION CONNECT										INSTALLATION DISCONNECT										SERVICE ORDER CONNECT		SERVICE ORDER DISCONNECT	
Installation		Common Overhead		Total w/Overhead		Installation		Common Overhead		Total w/Overhead		Order		Overhead		Total w/		Service		Overhead		Total w/	
Initial	Addr'l	Initial	Additional	Initial	Addr'l	Initial	Addr'l	Initial	Additional	Initial	Addr'l	Order	Overhead	Order	Overhead	Order	Overhead	Order	Overhead	Order	Overhead	Order	Overhead
A	B	C-A .0801	D-B .0801	E-A+C	F-B+D	G	H	I-G .0801	J-H .0801	K-G+I	L-H+J	M	N-M .0801	O-M+N	P	Q-P .0801	R-P+Q						
Unbundled Elements																							
Unbundled Loop																							
All Density Cells																							
Basic - No Prem Visit																							
- Prem Visit																							
ISDN - No Prem Visit																							
- Prem Visit																							
4W/Premium Loop - No Prem Visit																							
-Prem Visit																							
2 Wire Customer Specified Signaling- No Prem Visit																							
2 Wire Customer Specified Signaling- Prem Visit																							
4 Wire Customer Specified Signaling-No Prem Visit																							
4 Wire Customer Specified Signaling- Prem Visit																							
DS-1 Loop- No Prem Visit																							
DS-1 Loop Prem Visit																							
Coordinated Cutover																							
Loop - No Prem Visit																							
Loop - Prem Visit																							
Port																							
Unbundled Switching																							
Port Per MONTH																							
POTS/PBX/CTX																							
ISDN PRI																							
ISDN Single line BRI or CTX Port																							
Public/Semi-Public																							
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